REMARKS

Claims 1-32 are pending. Claims 10-14, 16-20, and 22 are rejected under 35 U.S.C. § 102(b). Claims 1-9, 12, 15, 21, and 23-32 are rejected under 35 U.S.C. § 103(a). Claims 8, 10, 13, 16, and 27 are currently amended.

Claims 10-14, 16-20, and 22 are rejected under 35 U.S.C. § 102(b) as being anticipated by Rogard (U.S. Pat. No. 4,718,066). Claim 10, as amended, recites "a data path coupled between said encoder and said output, said data path receiving information from said another data communication apparatus, **said data path selecting one of the original data bits and the overhead bits in response to a first information, said data path selecting the other of the original data bits and the overhead bits in response to a second information,** to be provided to said output for transmission across the communication channel to said another data communication apparatus." (emphasis added).

Claim 16, as amended, recites "A data communication apparatus, comprising: an input for receiving a received version of original bits **in response to a first information without overhead bits produced at another data communication apparatus by operation of an encoding algorithm applied to the original bits, said input receiving said overhead bits in response to a second information, said original bits and overhead bits** transmitted over a communication channel by said another data communication apparatus." (emphasis added).

Rogard discloses transmitting a set of data blocks continuously to a remote receiver. The transmitter interrupts transmission when it receives an indication that a sufficient number of data blocks has been correctly received. (col. 3, lines 26-35). A specific example of this method is illustrated at Figure 2 and described at col. 6, lines 11-30. Rogard fails to disclose "selecting one of the original data bits and the overhead bits in response to a first information" and selecting the other of the original data bits and the overhead bits in response to a second information" as required by claims 10-11 and 13-14. Rogard fails to disclose "receiving a received version of

TI-31284, Page 9

original bits in response to a first information without overhead bits" and "receiving said overhead bits in response to a second information" as required by claims 16-20 and 22.

An exemplary embodiment of the present invention discloses these features in Figure 12A as described at page 12, line 19 through page 13, line 10. For example, the data path selects the original data bits in response to an acknowledgement (ACK) and selects the overhead bits in response to a negative acknowledgement (NAK). Rogard fails to disclose these features of claims 10-11, 13-14, 16-20, and 22. Rogard fails to disclose any reception of original data bits without overhead bits at a remote receiver. According to Rogard, original data bits are always accompanied by overhead bits. Rogard fails to disclose refraining from transmitting the overhead bits. In fact, Rogard specifically discloses the "risk is that the transmitter will send one or two data blocks more than was necessary." (col. 6, lines 28-30). Thus, claims 10-11, 13-14, 16-20, and 22 are patentable under 35 U.S.C. § 102(b) over Rogard.

Claims 1-4, 6-9, 23-24, and 26-32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rogard in view of Palm (U.S. Pat. No. 6,694,470). Regarding independent claims 1, 23, and 27, Examiner admits that Rogard does not show a transmitting end refraining from transmitting overhead bits until the transmitting end receives an indication of error in reception from the receiving end. (Office Action 7/12/2005, page 3). Examiner relies on Palm for this feature of the claimed invention and specifically cites col. 3, lines 23-51, 48-67 and col. 15, lines 26-32.

Claim 1 specifically recites "the transmitting end **transmitting the original data bits without the overhead bits in a first transmission** to the receiving end; and the transmitting end **refraining from transmitting the overhead bits until the transmitting end receives an indication from the receiving end that the original data bits have not been correctly received at the receiving end.**" (emphasis added). Thus, at least two conditions are required by claim 1 that are not disclosed by Rogard or Palm, taken alone or in combination. First, original data bits are transmitted **without overhead bits**. Second, **if an error is detected in transmission, the overhead bits are then transmitted.** A significant advantage of the present

invention is that the overhead bits are not transmitted when there are no errors in the original transmission. Neither Rogard nor Palm teach or suggest such an advantage. Palm only discloses retransmission of original data when an error is detected. For example, Palm uses "retransmission" 11 times in col. 3, lines 23-67. Retransmission means transmitting the same data again. This is very different from the invention of claim 1. Please note that claim 1 recites "the transmitting end **transmitting the original data bits without the overhead bits in a first transmission** to the receiving end; and the transmitting end **refraining from transmitting the overhead bits until the transmitting end receives an indication from the receiving end that the original data bits have not been correctly received** at the receiving end." (emphasis added). Transmitting the overhead bits as recited in claim 1 when an error is detected is NOT a retransmission. The overhead bits were NOT transmitted in the first transmission. Thus, applicants respectfully submit that claim 1 and depending claims 2-7 are patentable under 35 U.S.C. § 103(a) over the cited references.

Independent claims 8, 23, and 27 are patentable under 35 U.S.C. § 103(a) over Rogard in view of Palm for the same reasons discussed with regard to claim 1.

Claim 8 is amended to more specifically recite features of the present invention. Claim 8, as amended, recites "the receiving end receiving from the transmitting end **a first transmission including original data bits without overhead bits** produced at the transmitting end by operation of an encoding algorithm applied to the original data bits; the receiving end determining whether the original data bits have been received correctly and, responsive to a determination that the original data bits have not been received correctly, the receiving end **transmitting to the transmitting end a request for transmission of the overhead bits**." (emphasis added).

Claim 23 recites "A method of transmitting data, comprising: applying an encoding algorithm that produces overhead bits to a plurality of original data bits that are to be transmitted; **transmitting the original data bits without the overhead bits in a first transmission;** and

refraining from transmitting the overhead bits until receiving an indication that the original data bits have not been correctly received." (emphasis added).

Claim 27 is amended to more specifically recite features of the present invention. Claim 27, as amended, recites "receiving a first transmission including original data bits without overhead bits produced by operation of an encoding algorithm applied to the original data bits; determining that the original data bits have not been received correctly; and transmitting a request for transmission of overhead bits responsive to the step of determining. (emphasis added).

Applicants acknowledge the rejection of depending claims under 35 U.S.C. § 103(a), but believe this rejection is moot in view of the foregoing discussion, since all independent claims are patentable.

In view of the foregoing, applicants respectfully request reconsideration and allowance of claims 1-32. If the Examiner finds any issue that is unresolved, please call applicants' attorney by dialing the telephone number printed below.

Respectfully submitted,

Robert N. Rountree
Attorney for Applicants
Reg. No. 39,347

Robert N. Rountree, LLC
70360 Highway 69
Cotopaxi, CO 81223
Phone/Fax: (719) 783-0990